

## **AMENDMENTS TO THE SPECIFICATION:**

Please replace the paragraph beginning on page 4, line 34 of the Substitute Specification with the following amended paragraph:

An example of constructing a floating chimney is presented in the following paragraphs. The example construction implements the main solar chimney with horizontal balloon cylindrical rings (Ring D1, Figure 2) from flexible wrapping of balloons or airships (with an average surface density of 0.068 kg/sqm). Each cylindrical balloon ring D1 is filled with gas He (that gives a lifting force under regular conditions 10.36 Nt/m) or other light non-flammable gas (e.g., NH<sub>3</sub> with lift force under regular conditions 4.97 Nt/m). The ring has an orthogonal cross-section and filling valves. The dimensions of orthogonal cross-section of ring D1 depend mainly on the diameter of solar chimney. Each As shown in Fig. 1a, each cylindrical ring D1 will be separated from next by a durable supporting ring D2 (which is shown in detail in Figure 3). Rings D2 may be manufactured by pipes of hard plastic or composite materials or aluminum with suitable diameter and thickness. Hence the ring D2 supports balloon ring D1 from compressive forces of deformity. The total weight of ring D2 has to be smaller than the lift force of the balloon ring D1. Thus each balloon ring D1 will be able to rise up to any atmospheric height as part of the floating solar chimney, lifting together at least one support ring D2. The exterior part of each ring D2 will have suitable tips for the fastening to other rings D2 with the help of threads 3 (shown in Fig. 3) of high strength, in order that intermediary balloon rings to be under pressure.

Please replace the paragraph beginning on page 5, line 30 of the Substitute Specification with the following amended paragraph:

Thus each part can accommodate any declined position imposed by exterior winds without problem. The successive parts of the floating chimney are separated by a separating balloon ring D1 filled with air from the environment, which separating balloon ring has a simple aperture or a special valve that allows air to enter and exit depending on the relative movement of successive independent parts of chimney by variable exterior winds. With these intermediate, separating air rings, each part of the floating solar chimney becomes dynamically independent from the rest. The main floating solar chimney (1.1) is constituted

by these successive and dynamically independent parts (sequence of D1 and D2 shown in Fig. 1a) fastened independently to the Heavy Base. The main floating solar chimney, and every component part of it, can float and stand the forces from the Bernoulli pressures caused by the internal updraft of warm air and the exterior winds. The thickness of balloon ring D1 is sufficient for the satisfactory heat insulation of the internal warm current of air, which circulates through the solar chimney, from the exterior air that has a lower temperature.

Please replace the paragraph beginning on page 6, line 14 of the Substitute Specification with the following amended paragraph:

The main floating solar chimney (1.1) is coupled to the Heavy Mobile Base (1.2). The Heavy Mobile Base (1.2) is constituted by two rings (A and B shown in Figs. 1a and 1b) of equal weight that are connected with exceptionally durable threads with high strength and high modulus, which threads are provided with flexible durable plastic films, so that the Heavy Mobile Base can accommodate any decline position while remaining attached to the top of the seat of chimney. The total weight of the Heavy Base (1.2) exceeds the overall lift force of the main chimney, and the Heavy Base forms a single set with the main chimney. Under regular conditions the upper ring A of the Heavy Base, which is manufactured with bigger diameter than the diameter of the upper part of the seat (1.4), sits on the seat of the chimney (1.4), while the lower ring B, which has smaller diameter than the internal diameter of upper part of the seat (1.4), remains inside the seat (1.4) of chimney. From the lower part of the internal ring of the Heavy Base (1.2), the folding part (1.3) of the floating solar chimney is suspended. This folding part (1.3), which has an accordion configuration, is constructed in a similar way as the main chimney, with the difference that the balloon rings D1 that constitute the folding part (1.3) have a simple aperture (or a special valve) which allows the air of the environment to enter and exit depending on the decline of main solar chimney. The height of the folding part (1.3) is selected so that it can receive the maximum decline of the main solar chimney.